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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,518	07/11/2003	Mark F. Bares	M297.12-0307 2968  EXAMINER	
27367	7590 01/12/2006	·		
	CHAMPLIN & KEL	PARRIES, DRU M		
SUITE 1400 - INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH			ART UNIT	PAPER NUMBER
MINNEAPO	LIS, MN 55402-3319		2836	
			DATE MAILED: 01/12/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)			
Office Action Summary		10/617,518	BARES ET AL.			
		Examiner	Art Unit			
		Dru M. Parries	2836			
Period fo	The MAILING DATE of this communication apport Reply	pears on the cover sheet with the	correspondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING D. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. D period for reply is specified above, the maximum statutory period or tree to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 11 Ju	<u>uly 2003</u> .				
2a) <u></u>	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
4)⊠	Claim(s) 1-20 is/are pending in the application					
	4a) Of the above claim(s) is/are withdraw	wn from consideration.				
·	5) Claim(s) is/are allowed.					
•	Claim(s) <u>1-12 and 15-20</u> is/are rejected.					
•	Claim(s) 13 and 14 is/are objected to.					
8)凵	Claim(s) are subject to restriction and/o	or election requirement.				
Application Papers						
9)[	The specification is objected to by the Examine	er.				
10)⊠ The drawing(s) filed on <u>11 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (	under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
<ol><li>Certified copies of the priority documents have been received in Application No</li></ol>						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* (	See the attached detailed Office action for a list	of the certified copies not receiv	ed.			
Attachmer	nt(s)					
	ce of References Cited (PTO-892)	4) Interview Summar				
	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail [ 5) Notice of Informal	Patent Application (PTO-152)			
Paper No(s)/Mail Date <u>12-11-03</u> . 6) Other:						

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#### **DETAILED ACTION**

## Claim Objections

1. Claim 16 is objected to because of the following informalities: The Examiner believes that the claim dependency is incorrect. The Examiner believes that this claim is dependent upon claim 15. Appropriate correction is required.

# Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner suggests that the word "when" (line 4) be replaced with the word "that".

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-3, 6-8, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art (Admission), Stevenson et al. (6,805,393) and Read (5,602,526). Admission teaches a loader having a frame, an operator door, a door latch and a striker, and the latch engaging the striker when the door is closed (Claim 8, lines 1-8). Admission fails to teach a

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sensor and interlock arrangement implemented into the vehicle. Stevenson teaches a door with a sensor mounted on the door adjacent to a latch, and a striker on the vehicle body. He teaches the sensor detecting whether the door is closed or not and then sends a signal (or lack there of) to indicate the position of the door (open or closed), to enable or disable a vehicle function (Abstract, Col. 3, lines 8-30). Stevenson doesn't explicitly teach exactly how his sensor system detects closure of the door nor what type of sensor it is. Read teaches a sensor system for detecting the closure of a door via two element sensor. He teaches one element being a sensor (magnetically actuated switch) attached to a vehicle body. He teaches a second element being a magnet (switch actuator) attached to the door of the vehicle. He goes on to teach the switch mounted to be juxtaposed to the magnet when the door is closed (abstract), which means, when combined with Stevenson, that one sensor element will be mounted on the latch, and the other would be mounted on the latch striker. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Stevenson's and Read's sensor/interlock system into Prior Art, so that there are some safety features incorporated into the system of the construction equipment to make operating the loader safer. None of the references teach explicitly the magnet being on the body of the vehicle and the sensor being on the door. It would have been obvious to one of ordinary skill in the art at the time of the invention to reverse the elements (magnet and sensor) in Read's teaching, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. In re Einstein, 9 USPO 167.

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6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art (Admission), Stevenson et al. (6,805,393) and Read (5,602,526) as applied to claims 1-3 above,

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and further in view of Cahn et al. (2004/0203381). Admission, Stevenson and Read teach an interlock arrangement on a loader as described above. These three references fail to teach what type of magnetically actuated switch is being used. Cahn teaches a magnetically actuated switch being a reed switch, and teaches that a reed switch could be replaced with a Hall Effect sensor ([0028]). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement either a magnetic reed switch or a Hall Effect sensor as the magnetically actuated switch because it wasn't specifically taught what type of switch that is, and possible replacements were taught and are well known in the art to work.

7. Claims 9 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art (Admission), Stevenson et al. (6,805,393) and Read (5,602,526) as applied to claim 8 above, and further in view of Wherley (2004/0000799). Admission, Stevenson and Read teach an interlock arrangement on a loader as described above. These three references fail to teach the functions being disabled to be hydraulic functions. Wherley teaches an interlock system, which detects the state of a door and upon detecting the door being in an open state disables hydraulic functions (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to disable the hydraulic lifting arms because it diminishes the potential for damage to an open door or a human being.

### Allowable Subject Matter

8. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims would be allowable because no prior art of

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record teaches an interlock system based on a door, wherein when the door is removed completely from the system, the operating functions will be enabled at all times.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dru M. Parries whose telephone number is (571) 272-8542. The examiner can normally be reached on Monday -Thursday from 8:00am to 5:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMP

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